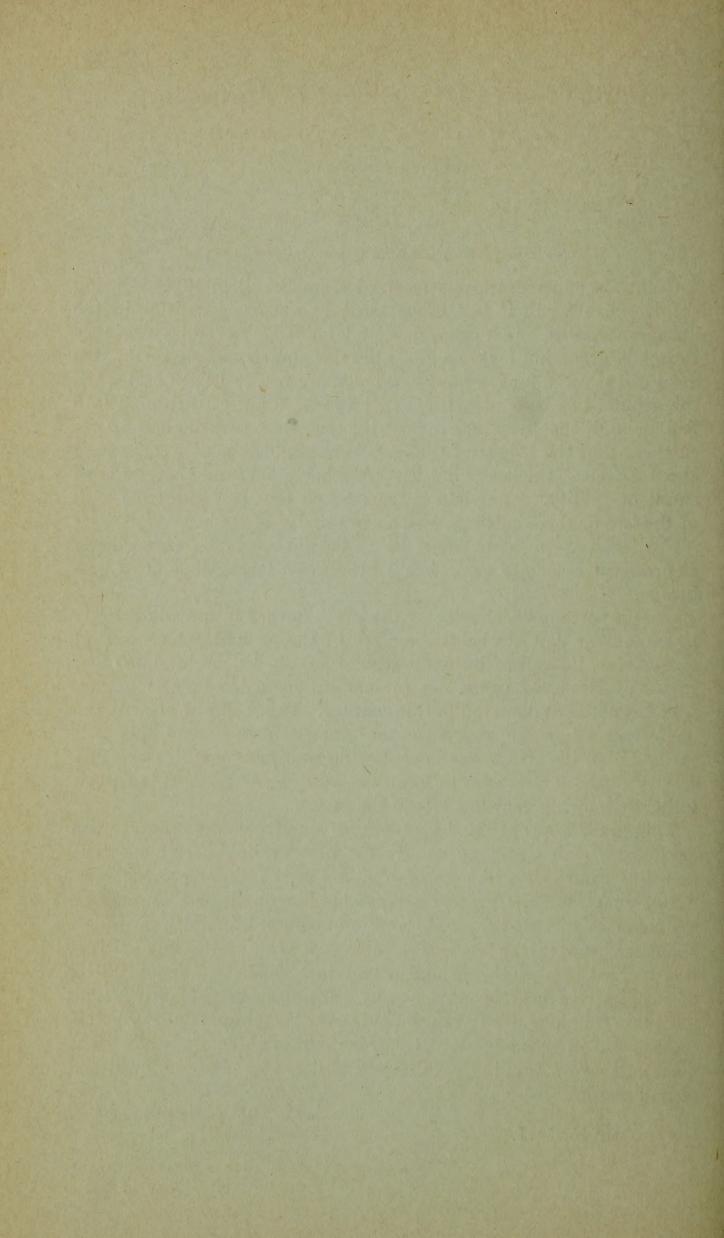
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United States Department of Agriculture,

BUREAU OF PLANT INDUSTRY,

Forage-Crop Investigations, WASHINGTON, D. C.

SACALINE.

Sacaline (Polygonum sachalinense), a plant related to buckwheat, was introduced into the United States in 1883 and much exploited in 1893 and for a few years thereafter. It has recently been advertised under the name Eureka clover, and enormous yields of green fodder are claimed.

Sacaline is a native of the island of Sakhalin, whence it obtained its common name and from where it was first described in 1859. The plant is a hardy herbaceous perennial and spreads by stout creeping rootstocks. The stems of well-grown plants become 6 to 15 feet high and bear numerous large heart-shaped leaves. The flowers are small, greenish white, and borne in small clusters in the axils of the leaves. Seeds are produced rather sparingly.

Sacaline was cultivated as an ornamental for some years in Europe before M. Doumet-Adanson in France called attention to its value as forage. As the plant was said to be propagated easily and very vigorous in growth, this resulted in its enthusiastic booming. It was even extolled as a crop for arid regions, though it is native to a cool, moist climate. In the years immediately following, the

plant was much advertised in the United States.

Tests of sacaline were made about this time by the United States Department of Agriculture and by many State agricultural experiment stations, of which the following published results: Kansas, Iowa, Colorado, Nebraska, Texas, North Carolina, Florida, Ontario, California, Washington, and Massachusetts. Most of the reports are adverse, the plant not thriving well under the conditions tested, but partially favorable results were secured in Florida, Iowa, North Carolina, and Massachusetts. In Ontario the early spring growth was usually injured by frost and in the winter of 1898-99 the plants were completely killed.

In a few instances farmers and others reported vigorous growth and large yields of forage. Several investigators feared the plant might become a pernicious weed. In general, however, difficulty

was met in growing the plant or securing satisfactory growth.

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In spite of its vigorous exploitation by interested parties, it is significant that sacaline has never secured any definite agricultural status in this country. Occasionally, splendid specimens are found in gardens, which seem to indicate that great yields under field conditions might be obtained, but such hopes thus far have not been realized.

In the advertisements of "Eureka clover" it is claimed that in western Oregon it will yield over 300 tons of green forage to the acre. In Europe it was asserted that yields of 100 to 200 tons per acre were secured. In all cases published, however, the yield seems to have been estimated from the product of a single plant, a method which gives results far greater than are ever realized in actual agriculture.

It is quite possible that in certain portions of the United States, such as western Oregon, sacaline may be a valuable plant to cultivate, but one should test it cautiously by first trying a few plants.

Sacaline is best propagated by pieces of the rootstock. The seeds are usually poor and difficult to germinate, but if used should be planted under very favorable conditions and the young plants set out where desired. If a single plant thrives well it will spread greatly and in time furnish rootstocks to plant a large area. From the experience of American and European investigators, however, it would seem that only in favored localities is there any likelihood of the plant proving valuable enough to cultivate for forage.

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